

REMARKS

The Office Action mailed on September 18, 2008 has been reviewed. Claims 1-13 are pending in this application.

Rejections Under 35 U.S.C. § 103

Claims 1-6 and 8-13 were rejected under 35 USC § 103(a) as being unpatentable over Lee et al. (U.S. Patent No. 6,535,493) in view of Skinner, Sr. (U.S. Patent No. 5,467,384).

Claim 1 of the present application recites:

1. An apparatus for communicating wireless local area network (WLAN) signals with an internetworking device using a transport network, the apparatus comprising:
 - an access point coupled to the transport network for communicating with an internetworking device, the transport network further providing a power signal to power at least some components of the access point;
 - the access point further comprising:
 - i) a wireless local area network (WLAN) access point, for receiving wireless local area network signals from wireless computing equipment and converting such signals to local area network compatible signals; and
 - ii) an access point remote converter, for receiving the local area network compatible signals from the wireless local area network access point and converting such signals to transport modulated format signals suitable for transmission over the transport network.

The Office Action took the position that the Router 114 of Lee is the “internetworking device” with which the wireless local area network signals are communicated using the transport network. The Office Action also took the position that the LAN 110 of Lee teaches a “transport network” as recited in claim 1 of the present

application and that the Router 114 of Lee teaches an “access point remote converter” as recited in claim 1.

However, there is no explanation as to why the LAN 110 of Lee can properly be considered a “transport network” for which “an “access point remote converter” converts “local area network compatible signals from the wireless local area network access point” to “transport modulated format signals ...”. It is noted that the Router 114 of Lee does not convert the LAN signals it receives from the access points 102 and 104 of Lee for transmission over the LAN 110 (the alleged “transport network”) since the Router 114 receives the LAN signals output by the access points 102 from the LAN 110 in the first place (that is, the LAN signals are already formatted for communication over the LAN 110 since that is how they are communicated to the Router 114 in the first place).

Moreover, the Office Action is taking the position that the Router 114 of Lee is a part of the access point when it asserts that the Router 114 of Lee is an “access point remote converter” as recited in claim 1. However, claim 1 of the present application recites “an access point coupled to the transport network for communicating with an internetworking device”. Clearly, the Router 114 of Lee is not coupled to the alleged transport network (the LAN 110 of Lee) in order to communicate with itself (the alleged internetworking device).

Furthermore, it is noted that Lee is silent as to how the high-level Internet cloud 120 of FIG. 1 is implemented.

In addition, the Office Action conceded that Lee fails to teach or suggest “the transport network further providing a power signal to power at least some components of the access point” as recited in claim 1. However, the Office Action took the position that this is taught by Skinner. Then the Office Action conclude that: “Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to combine Lee with Skinner, because at some point one Lee's Access Points would be placed in an area where power would be hard to supply, so that Skinner would solve that problem.” Applicant respectfully traverses these assertions.

Skinner itself relates to the powering of telephony equipment in a video/telephony cable network because the telephone is used for provide so-called “life line service”. The Office Action contains no explanation whatsoever as to how the telephony-powering techniques of Skinner could even be employed in the data network of Lee. Instead, the Office Action only contains general, conclusory statements.

Claims 2-6 and 8-11 all depend from claim 1. Therefore, at least the arguments set forth above apply to these dependent claims as well. Since Applicant believes these dependent claims are allowable for the reasons given above with respect to claim 1, specific arguments with respect to these dependent claims have not been provided in this response. Applicant, however, reserves the right to submit further arguments directed to these claims if a further response is required.

Claim 12 of the present application recites:

12. A distribution network for coupling wireless local area network signals between an internetworking device and a plurality of access points that are remotely located, to provide wireless local area network service within a geographic coverage area composed of microcells, the distribution network making use of available transport cabling, comprising:

(a) the plurality of access points, each deployed with a respective one of the microcells and furthermore, each access point being coupled to available transport cabling for communicating with an internetworking device, the available transport cabling further providing a power signal to power at least some portions of the access point, the access points each further comprising:

i) a wireless local area network access point, for receiving wireless local area network signals from computing equipment located within the respective microcell, and converting such signals to local area network compatible signals; and

ii) an access point remote converter, for receiving the local area network compatible signals from the wireless local area network access point and converting

such signals to transport modulated format signals suitable for transmission over the available transport cabling.

The Office Action took the position that the “internetworking device” recited in claim 12 is the Router 114 of Lee. The Office Action also took the position the LAN 110 of Lee teaches a “available transport cabling” as recited in claim 11 of the present application and the Router 114 of Lee teaches “an access point remote converter” as recited in claim 12.

However, there is no explanation as to why the LAN 110 of Lee can properly be considered “available transport cabling” for which “an “access point remote converter” converts “local area network compatible signals from the wireless local area network access point” to “transport modulated format signals ...”. It is noted that the Router 114 of Lee does not convert the LAN signals it receives from the access points 102 and 104 of Lee since the Router 114 receives the LAN signals output by the access points 102 from the LAN 110 in the first place (that is, the LAN signals are already formatted for communication over the LAN 110 since that is how they are communicated to the Router 114 in the first place).

Furthermore, the Office Action is taking the position that the Router 114 of Lee is a part of the access point when it asserts that the Router 114 of Lee is an “access point remote converter” as recited in claim 12. However, claim 12 of the present application recites “each access point being coupled to available transport cabling for communicating with an internetworking device”. Clearly, the Router 114 of Lee is not coupled to the alleged available transport cabling (the LAN 110 of Lee) in order to communicate with itself (the alleged internetworking device).

Moreover, Applicant submits the at least the same argument regarding Skinner and the proposed combination thereof with Lee set forth above with respect to claim 1 apply to claim 12 as well.

Claim 13 of the present application recites:

13. A distribution network for coupling wireless local area network signals between an internetworking device and a plurality access points that are remotely located, to provide wireless local area network service within a geographic coverage area composed of microcells, the distribution network making use of available transport cabling, comprising:

(a) the plurality of access points, each deployed with a respective one of the microcells and furthermore, each access point being coupled to available transport cabling for communicating with an internetworking device, the available transport cabling further providing a power signal to power at least some portions of the access point, the access points each further comprising:

i) a wireless local area network access point, for receiving wireless local area network signals from computing equipment located within the respective microcell, and converting such signals to local area network compatible signals; and

ii) an access point remote converter, for receiving the local area network compatible signals from the wireless local area network access point and converting such signals to transport modulated format signals suitable for transmission over the available transport cabling; and

(b) a head end access point, comprising:

a head end remote bridge, connected to receive the transport modulated format signals from the transport cabling, and to convert such signals to local area network compatible signals.

The Office Action took the position that the “internetworking device” recited in claim 12 is the Router 114 of Lee. The Office Action also appears to have taken the position that “available transport cabling” as recited in claim 13 of the present application is taught by the LAN 110 of Lee and that the “access point remote converter” of claim 13 is taught by the Access Points 102 and 104 of Lee.

However, it is respectfully submitted that the Access Points 102 and 104 do not teach an “an access point remote converter, for receiving the local area network

compatible signals from the wireless local area network access point and converting such signals to transport modulated format signals suitable for transmission over the available transport cabling” as recited in claim 13 since the access points 102 and 104 of Lee are the access points that are outputting LAN signals in the first place.

Furthermore, the Office Action is taking the position that the Router 114 of Lee is a part of the access point when it asserts that the Router 114 of Lee is an “access point remote converter” as recited in claim 13. However, claim 13 of the present application recites “each access point being coupled to available transport cabling for communicating with an internetworking device”. Clearly, the Router 114 of Lee is not coupled to the alleged available transport cabling (the LAN 110 of Lee) in order to communicate with itself (the alleged internetworking device).

Moreover, Applicant submits the at least the same argument regarding Skinner and the proposed combination thereof with Lee set forth above with respect to claim 1 apply to claim 13 as well.

Claim 7 was rejected under 35 USC § 103(a) as being unpatentable over Lee et al. (U.S. Patent No. 6,535,493) in view of Skinner, Sr. (U.S. Patent No. 5,467,384) and further in view of Thornton et al. (U.S. Patent No. 6,426,970).

Claim 7 depends from claim 1. Therefore, at least the arguments set forth above apply to claim 7 as well. Since Applicant believes these dependent claims are allowable for the reasons given above with respect to claim 1, specific arguments with respect to claim 7 have not been provided in this response. Applicant, however, reserves the right to submit further arguments directed to this claim if a further response is required.

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Title: ARCHITECTURE FOR SIGNAL DISTRIBUTION IN WIRELESS DATA NETWORK

CONCLUSION

Applicant respectfully submits that claims **1-13** are in condition for allowance and notification to that effect is earnestly requested. If necessary, please charge any additional fees or credit overpayments to Deposit Account No. 502432.

If the Examiner has any questions or concerns regarding this application, please contact the undersigned at the telephone number listed below.

Respectfully submitted,

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